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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,214	09/12/2003	Yong Woo Kim	Kim 09/03	9120

7590 09/07/2005

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EXAMINER

HWANG, VICTOR KENNY

ART UNIT	PAPER NUMBER
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3764

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,214

Applicant(s)

KIM, YONG WOO

Examiner

Victor K. Hwang

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-8, 10-13, 16, 17 and 20-26 is/are rejected.
- 7) ☒ Claim(s) 9, 14, 15, 18, 19 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

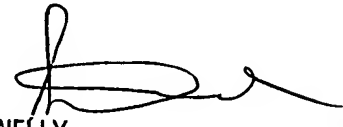
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


JEROME W. DONNELLY
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5-8, 10-13, 16, 17 and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by *Steffee* (US Pat. 4,733,860). *Steffee* discloses a variable resistance exercising device comprising different numbers of springs 156 to resist movement of a rod 150 (centermost channels joined by bolt 154) moveable in an exercising direction. At least one of the plurality of springs 156 is connected to the rod to provide basic resistance to movement of the rod. The remaining plurality of springs 156 are connected to a plurality of moveable end connectors 158 that are selectively attachable to the rod so that without disconnecting or reconnecting any spring ends, different numbers of the remaining springs 156 can be deployed to resist movement of the rod by means of varying the attachment of moveable end connectors to the rod. The moveable end connectors 158 are secured to a series of stacked and moveable links 150. The stack of links extend away from a fixed base retainer 142. The rod extends through the stack of moveable links and is guidedly moved in the resisted direction through the stack of links.

The moveable links are selectively connectable to the rod so that the link connected to the rod determines the portion of the link stack that moves with the rod in the resisted direction and thereby determines that the springs connected to the moving portion of the link stack will resist movement of the rod in the resisted direction. The springs 156 are extended between the fixed

retainer 142 and the link connections 158 and thereby bias the link stack in a home position.

Holes 148 extend through links in the stack and register with holes in the rod in a home position of the rod. A pin 146 is insertable through a link hole and into a rod hole to attach the selected link to the rod.

The extension springs are operatively connected between the base and one of a plurality of the links arranged around the rod. One of the links is selectively attached to the rod by inserting the pin through the hole in the link and into a registered hole in the rod while the rod is in the home position. The rod is moved to extend any spring connected to the attached link with the rod and to any link on an extending side of the attached link, and not to extend with the rod any spring attached to any link on a base side of the attached link.

3. Claims 5-8, 10-13, 16, 17 and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by *Jones* (US Pat. 4,600,196). *Jones* discloses a variable resistance exercising device comprising different numbers of springs 52 to resist movement of a rod 53 (innermost plates) moveable in an exercising direction. At least one of the plurality of springs 52 is connected to the rod to provide basic resistance to movement of the rod. The remaining plurality of springs 52 are connected to a plurality of moveable end connectors 53 (remaining plates) that are selectively attachable to the rod so that without disconnecting or reconnecting any spring ends, different numbers of the remaining springs can be deployed to resist movement of the rod by means of varying the attachment of moveable end connectors to the rod. The moveable end connectors are secured to a series of stacked and moveable links 53 (the end connectors form a part of the links). The stack of links extend away from a fixed base retainer 51. The rod extends through

the stack of moveable links and is guidedly moved in the resisted direction through the stack of links.

The moveable links are selectively connectable to the rod so that the link connected to the rod determines the portion of the link stack that moves with the rod in the resisted direction and thereby determines that the springs connected to the moving portion of the link stack will resist movement of the rod in the resisted direction. The springs 52 are extended between the fixed retainer 51 and the link connections and thereby bias the link stack in a home position. Holes 60 extend through links in the stack and register with holes in the rod in a home position of the rod. A pin 62 is insertable through a link hole and into a rod hole to attach the selected link to the rod.

The extension springs are operatively connected between the base and one of a plurality of the links arranged around the rod. One of the links is selectively attached to the rod by inserting the pin through the hole in the link and into a registered hole in the rod while the rod is in the home position. The rod is moved to extend any spring connected to the attached link with the rod and to any link on an extending side of the attached link, and not to extend with the rod any spring attached to any link on a base side of the attached link.

Allowable Subject Matter

4. Claims 1-4 are allowed.
5. Claims 8, 9, 14, 15, 18, 19 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose the links or end connectors formed to allow springs to pass through a link nearer to the base to reach a link arranged farther from the base (claims 1, 9, 14, 18 and 27); the links having a spring connection that can be oriented in different positions as the links are arranged in the stack (claim 15); and the links formed as extrusions that can be arranged in different orientations around the rod (claim 18).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Olschansky et al. (US Pat. 4,666,149), *Olschansky et al.* (US Pat. 5,039,092), *Olschansky et al.* (US Pat. 5,074,551), *Grant* (US Pat. 5,348,524), *Grant* (US Pat. 5,522,784), *Schmittner* (US Pat. 5,637,062), *Allison* (US Pat. 6,561,956), *Deola* (US Pat. 6,793,610 B2) disclose exercise apparatus comprising variable spring resistance assemblies.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (571) 272-4976. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time.

The facsimile number for submitting papers directly to the examiner for informal correspondence is (571) 273-4976. The facsimile number for submitting all formal correspondence is (571) 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Huson can be reached on (571) 272-4887.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor K. Hwang
September 6, 2005

JEROME W. DONNELLY
PRIMARY EXAMINER

